

EXPLORING HISTORY IN YOUR OWN BACKYARD: THE ASHLAND ESTATE

**An Historical Archaeology Resource Guide
for Elementary and Middle School Teachers
(Grades 4-8)**



**By
Cecilia Mañosa**



**Kentucky Archaeological Survey
Jointly Administered by:
University of Kentucky
Kentucky Heritage Council
KAS Report No. 59**

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THE INFORMATION PRESENTED in this guide draws on the results of archaeological research carried out at Ashland since the 1990s by the Kentucky Archaeological Survey (jointly administered by the Kentucky Heritage Council and the University of Kentucky's Department of Anthropology) and the University of Kentucky's Program for Archaeological Research.

THE PREPARATION OF THIS GUIDE was made possible through the generous help provided by different people. I would like to thank Dave Pollack for offering me the opportunity to become involved in the Ashland educational project. A special thanks to Kim and Steve McBride for graciously sharing their knowledge of the archaeological work they carried out at Ashland. Kim McBride also offered valuable reading resources and comments for improving the guide. My sincere thanks also go to Gwynn Henderson for taking the time to listen and exchange ideas during the development of this guide and for providing insightful editorial comments. Thanks are also extended to Judy Sizemore and Carl Shields for contributing valuable suggestions that enhanced the quality of the activities. Special thanks go to Donna Gilbreath, who did a wonderful job with the graphics. Renée Bonzani kindly suggested botanical references for the archaeobotany activity. Thanks also go to Eric Brooks, the curator at Ashland, for his assistance in making this educational initiative a reality.

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The *Ashland Project* is funded by the Kentucky Transportation Cabinet, the Henry Clay Memorial Foundation, and the Kentucky Archaeological Survey, which is jointly administered by the Kentucky Heritage Council and the University of Kentucky, Department of Anthropology.

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Activity Sheet And Handout Credits

My Timeline activity sheet: taken from Smith, Shelley J., Jeanne M. Moe, Kelly A. Letts, and Danielle M. Paterson. 1993. *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades*. Bureau of Land Management, U.S. Department of the Interior, Washington, D.C., pp. 24.

The Time of My Life activity sheet: taken from Smith, Shelley J., Jeanne M. Moe, Kelly A. Letts, and Danielle M. Paterson. 1993. *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades*. Bureau of Land Management, U.S. Department of the Interior, Washington, D.C., pp. 25.

Magnified Seeds handout: adapted from Price, L. Margo, Patricia M. Samford, and Vincas Steponaitis. 2001. *Intrigue of the Past: North Carolina's First Peoples. A Teacher's Activity Guide for Fourth through Seventh Grades*. Research Laboratories of Archaeology. The University of North Carolina at Chapel Hill, Chapel Hill, pp. 89.

Seed Analysis activity sheet: taken and adapted from Price L. Margo, Patricia M. Samford, and Vincas Steponaitis. 2001. *Intrigue of the Past: North Carolina's First Peoples. A Teacher's Activity Guide for Fourth through Seventh Grades*. Research Laboratories of Archaeology. The University of North Carolina at Chapel Hill, Chapel Hill, pp. 90.

What is Ashland?

Have you ever thought of Henry Clay's Ashland Estate, located in Lexington, Kentucky, as a plantation? Several characteristics made the Ashland Estate a plantation in Kentucky during the Antebellum period of Kentucky's history (1820-1861). These included: (1) large acreage: the estate covered over 600 acres, (2) different and varied types of farm activities: mainly those oriented to the market rather than to fulfill a family's needs, (3) large labor force: compound enslaved African-Americans numbered over 50 at the highest employed in the activities, and (4) the wealth of the owner. During this period, plantation-type agriculture and commercially oriented farms expanded in the Bluegrass. Around the 1830s, African-American slaves made up 24.7% of the state's total population. Although some individuals in Kentucky owned large numbers of slaves, most slaveholders owned five or fewer. Owning over fifty slaves, Kentucky's U.S. Senator Henry Clay would have been considered a large slaveholder for his time.

Senator Clay and his family built their home at Ashland in the early 1800s. The entire estate covered nearly 600 acres. The family grew hemp and grains, and raised livestock on their property. Clay was very interested in stock breeding and imported pure-bred stock, particularly sheep, cattle, horses, donkeys, and mules, from all over the world. During Clay's long absences to Washington D.C., his wife, Lucretia Hart Clay, and an overseer or a renter managed the farm operations.

After Clay's death in 1852, his heirs sold the estate to Henry Clay's son, James Brown Clay. During the Civil War, James B. Clay and his family moved to Canada. James died in Canada and his wife sold the estate to Kentucky University, which would in time become the University of Kentucky. From 1866 to 1882, the Ashland house was the residence of Kentucky University's A&M College Regent, John Bowman, and his family. After that, Henry C. and Ann Clay McDowell, a granddaughter of Henry Clay, purchased it. Except for the period when Ashland was the property of Kentucky University, the estate remained in the hands of Clay's descendants.

The Ashland estate was used as a plantation until the 1920s, when the McDowells, heirs of Henry Clay, sold it for subdivision. In the 1930s, a total of 20 acres surrounding the house and grounds became an historic site operated by the Henry Clay Memorial Foundation with support from the Lexington-Fayette Urban-County Government.

What Is Archaeology?

Archaeology is a subdivision of Anthropology, a social science dedicated to the study of human culture. Archaeology is the scientific study of past human lifeways based on the analysis of material remains (artifacts and sites) that people left behind.

Historical archaeology and prehistoric archaeology are two specialized sub-disciplines within the field of archeology. Historical archaeologists study the artifacts and sites, but also the documents (for example, letters, deeds, and wills) written about/by the people they are studying. Unlike historical archaeologists, prehistoric archaeologists study a span of time when people did not leave any written documents. The artifacts and the places are the only clues about their past lifeways. Whenever possible, prehistoric archaeologists study living American Indian communities to further understand the pre-Columbian period.

Preserving And Protecting Archaeological Sites

Archaeological sites are disappearing at a frightening rate. The problem is so serious and widespread that if sites continue to be destroyed at the present rate, 50-100 years from now there may be few left to preserve.

Modern development (the construction of roads, homes and factories; and our needs for energy, water and agricultural products) and natural forces (land erosion, and rising sea levels) make losses of some sites unavoidable. But looting and vandalism of archaeological sites needlessly and senselessly destroys our cultural heritage.

Looters have little interest in studying and understanding the past. They are treasure hunters interested in digging up artifacts for financial gain or to add specimens to their own private collections. In order to find the few objects of their desire, they destroy priceless information about the people who long ago lived at these sites. The acts of *vandals* who carve their initials alongside ancient rockart may seem more benign than the actions of looters, but the impact on our heritage is just as great.

Surface *collectors* walk farm fields or urban construction sites looking for specimens to add to their collections. If collectors do not catalogue their finds; draw maps showing the locations of the artifacts at the site and the location of the site on the landscape; and report their site locations, they too, are destroying important information about our collective heritage.

So what should an interested person do to help preserve and protect Kentucky's archaeological sites for the future?

Read all you can about Kentucky's rich archaeological heritage.

Decide that archaeological sites are worth protecting; guard against disturbing the soil where sites are located; and make others aware of this.

If you must surface collect, record where you found the artifacts and what other artifacts were found with them; draw maps showing the location of the site

on the landscape; report the location of the site to the Office of State Archaeology in Lexington; and be sure to catalogue your collection.

Never dig at an archaeological site unless under the supervision of a professional archaeologist.

Discourage the buying, selling, and trading of artifacts. The market for artifacts encourages looting.

Report the locations of sites you know about to state and federal authorities, and also report to them any incidents of looting or site destruction.

Archaeological Methods

Archaeologists use the scientific method to study the past by formulating research questions and then using various strategies to collect and analyze data. Contrary to what most people think, archaeologists spend most of their time in the laboratory analyzing rather than in the field excavating. While archaeologists may devote two summers to collecting the data in the field, it will take them several years to complete the laboratory analysis and write-up their results for publication.

Archaeologists know that in excavating a site, they will necessarily destroy part of it. Armed with meticulous recording techniques, archaeologists document in detail the location of everything they find. As they dig into new layers, they are careful to leave all artifacts within a layer-- glass, pottery fragments, pits, and any other evidence --in place until all are carefully inspected, drawn, and photographed. Dirt from each layer is carefully sifted, using a fine-mesh screen, to recover smaller artifacts or fragments. The artifacts are placed in numbered bags before proceeding to the layer below. Samples of dirt are taken for flotation, a method used to recover tiny seeds or other plant remains and other small objects too small to recover from screens (discussed in a succeeding activity).

Back in the laboratory, analyses of the materials begin. Archaeologists use all their detailed records to carry-out the analysis and answer their research questions. Once the artifacts have been analyzed and the report written, archaeologists then curate and store all of their notes, maps, photographs, and artifacts at a museum facility for future research or display.

Why Archaeology at Ashland?

While we may often think of science and history as two separate and disconnected fields of study, when it comes to understanding the past, they are actually interwoven. Through the combined use of technology, archaeological methods and theories, and documentary sources, historical archaeologists offer us a window into the recent recorded past.

Since the 1990s, the investigations of historical archaeologists from the Kentucky Archaeological Survey (jointly administered by the Kentucky Heritage Council and the University of Kentucky Department of Anthropology) and the

University of Kentucky Program for Archaeological Research have improved our knowledge and understanding of life at the Henry Clay Estate. Their work also has been important in assisting the Foundation's restoration and preservation efforts.

Excavations carried out at Ashland have revealed new information about the main house and outbuildings. For example, archaeologists' work has helped locate and aid in the interpretation of the original foundation of Clay's main house. Similarly, excavations carried out in and around one of the outbuildings showed that it was used as a washhouse and a privy. The privy produced large quantities of ceramics, bottle glass, and animal and plant remains, a sign of the wealth of the family. Also found were fragments and complete vessels of very expensive ceramic wares, including porcelain, gilt and painted types, as well as many tableware vessels. In addition, finding large quantities of wine bottles and high quality meat cuts and wild game further confirmed that the owners could afford an expensive lifestyle.

Archaeologists were successful in locating the intact remains of a Springfield Gas Machine, used for lighting in the nineteenth and early twentieth centuries. This was replaced by electric service in 1907. The machine was fueled with gasoline fed into a generator unit placed underground and away from the main house. Gas fixtures can still be seen in the house. Six chandeliers or pendants, which are now fitted for electricity, were originally fueled by gas. The gas works at Ashland represent an example of modernization in the history of the estate. It not only improved the lighting in the house, but also demonstrated that the family was up-to-date, stylish, and wealthy. Today, visitors to Ashland can tour the privy facility and its exhibit, and the gas works exhibit.

Why Integrate Ashland Archaeology Into Your Classroom?

Historical archaeology and history play an important part in helping us understand Ashland's past. Historical documents alone do not provide us with a complete picture of all of the estate's inhabitants and their daily practices.

Think about the slaves who made-up an important part of Ashland's work force. No maps show where they lived. Archaeology provided some answers, the material remains that people left behind offered clues about the people and events that had taken place. Excavations found the remains of what constituted the slave quarters. By using archaeology in conjunction with history, we can know more about all of the people who played a role in the past and how they contributed to our history and heritage.

From an educational perspective, archaeology serves three purposes:

- First, it promotes a sense of responsibility and stewardship for America's cultural heritage. How? By raising awareness of the value of learning about and preserving the past.
- Second, archaeology is an innovative means of capturing students' attention while addressing many educational concerns in the classroom. Why? As humans, we all have an interest in our past. It

gives meaning to our lives and helps us understand our individual and collective heritage. This curiosity can be channeled to teach a variety of topics in the social and natural sciences.

- Third, because of the integrative interdisciplinary nature of archaeology, archaeology also can address some of the educational needs of educators today, such as scientific inquiry, problem solving, cooperative learning, and citizenship skills.

About This Resource Guide

In order to tailor your Ashland visit to your special needs as educators, we have assembled this series of activities. It includes two interpretive activities, one on-site activity, and two preservation activities. When designing them, we took into account several of the curriculum areas and curriculum connections (Kentucky Learning Goals and Academic Expectations) Kentucky teachers need to achieve. We hope these activities will enhance your students' learning experience at this renowned historic site.

How You Can Help

Let us hear from you! Mail/email your comments to Dr. Kim McBride, Kentucky Archaeological Survey, 1020-A Export Street, Lexington, KY 40506-9854, kamcbr00@uky.edu and tell us about your ideas on how to improve this guide.

KENTUCKY LEARNING GOALS AND ACADEMIC EXPECTATIONS ADDRESSED

Goal 1: 1.2-1.4, 1.10-1.13

Goal 2: 2.1, 2.2, 2.5, 2.6, 2.16, 2.17, 2.20-2.23

Goal 4: 4.2

Goal 5: 5.1, 5.2, 5.4, 5.5

Goal 6: 6.1-6.3

Elementary and Middle School Science Content Addressed

Scientific Inquiry (2.1)

Students will

- ask simple scientific questions that can be investigated through observations.
- use tools (i.e., classification, prediction) in scientific investigations.
- use evidence (i.e., observations, data) from simple scientific investigations and scientific knowledge to develop reasonable explanations.
- communicate (i.e., draw, write) observations and results of scientific investigations.
- review and ask questions about scientific investigations and explanations of others.

Applications and Connections (2.6)

Students will

- demonstrate the role science plays in life: past, present, and future.

Elementary and Middle School Social Sciences Content Addressed

Historical Perspective (2.20)

Students will

- learn first-hand that history can be understood by using a variety of primary and secondary sources and tools (i.e., artifacts, timelines).
- learn that primary and secondary sources, artifacts, and time lines are essential tools in the study and interpretation of history.
- discover that interpretations of history are subject to change as new information is uncovered.

Interpretive Activity I

Why is the Past Important?

Grade Level: 4-8

Time Required: 15-30 minutes

Curriculum Areas: science, social studies, and language arts

Curriculum Connections: 1.4, 1.11, 1.12, 2.2, 2.17, 2.21, 4.2,5.2 (extension)

Students will:

- make sense of messages they listen to.
- write/speak to communicate ideas and information to an audience for a real purpose.
- identify, analyze, and use patterns to understand past and present events.
- interact effectively and work cooperatively.
- observe, analyze, and interpret human behaviors to better understand people and their relationships.
- use productive team membership skills.
- use creative thinking skills.

Materials

Students bring to class an object, photograph, or drawing of an object that represents their past.

Vocabulary

Archaeology: a method of studying past human cultures based on material evidence (artifacts and sites).

Archaeologist: a scientist who seeks to understand past human cultures through the careful study of artifacts and other evidence from archaeological sites.

Archaeological site: a place where human activities occurred and evidence of these activities was left.

Artifact: any object made, modified, or used by humans; usually this term refers to a portable item.

Culture: a set of learned beliefs, values, styles, and behaviors generally shared by members of a society or group.

Context: the relationship artifacts have to each other and the situation in which they are found.

History: the study of past events and cultures using written records, oral traditions, and archaeological evidence as sources of information.

Pre-Columbian: the period of human experience prior to written records; in the Americas, pre-Columbian refers to the period covering at least 12,000 years before Europeans and their writing systems arrived.

Background

Archaeological sites and *artifacts* can be messengers from the past. If we know how to read their messages, they can tell us about the people who made and used the artifacts and then left them behind. Although the owners of the artifacts and the inhabitants of the sites may have lived hundreds or even thousands of years ago, they undoubtedly had many of the same needs and concerns, hopes and fears, joys and sorrows that we have today.

These messengers from the past belong to everyone. Everyone has a right to know how the world came to be and to know his or her place in the world. Material traces and their *context* play a universal role in providing the links between the past, the present, and the future.

The link to the past is provided through scientific analysis as well as through traditional heritage values placed on archaeological sites and artifacts. For example, Ashland, The Henry Clay Estate in Lexington, Kentucky provides a tangible link to the Antebellum period in Kentucky history (1820-1861). Scientists called *archaeologists* study the artifacts and the buildings that the Clay family left behind to learn more about nineteenth century plantation lifeways. Similarly, the *Pre-Columbian* sites throughout Kentucky represent different episodes in the lives of American Indian communities on this land. For example, archaeological work in western and southern Kentucky shows that farming communities built planned villages and towns there, which were often fortified, between A.D. 900 to 1,500.

Setting the Stage

This lesson will help students begin to discover why we study the past. Assign students to bring an object (artifact) or photograph from home that tells something about their own or their families' past. If the object cannot be brought to class, a drawing or description will suffice.

Procedure

1. Share background information and vocabulary.

2. Working in groups of 3 to 4, students tell one another what the object conveys about their past.
3. In a class discussion, ask the following questions:
 - Is it important for you to know about your past? Why or why not?
 - Is it important to know about the human past? Why or why not?
 - Humans have lived in Kentucky for at least 12,000 years. Is it important to know about their lives? Why or why not?
4. What can we learn from the past? Have the students brainstorm ideas. Some answers might include: how humans lived in the past and why their lifeways changed over time.

Closure

Emphasize that the students' past and their families' past is important; that their past helps define who they are. Ask each student to spend five minutes writing an explanation of the artifact he or she brought to share. The students should include in the narrative why the artifact is important to his or her family history and tell why it is important to know about the past.

Extension

Repeat this lesson again at the close of your study of the Ashland archaeology unit to demonstrate that students have broadened their understanding of archaeology and the past.

This activity was adapted from *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades* by Shelley J. Smith, Jeanne M. Moe, Kelly A. Letts, and Danielle M. Paterson. 1993. Bureau of Land Management, U.S. Department of the Interior, Washington, D.C., pp. 9-10.

Interpretive Activity II **The Importance of Time: Understanding Chronology**

Grade Level: 4-8

Time Required: 45-60 minutes

Curriculum Areas: science, social studies, and language arts

Curriculum Connections: 1.2, 1.3, 1.4, 1.10, 2.1, 2.2, 2.5, 2.6, 2.17, 5.5, 6.1

Students will:

- make sense of various materials/messages they read, observe, and listen to.
- organize information through development and use of classification rules and systems.
- understand scientific ways of thinking and working and use those methods to solve real-life problems.
- identify, analyze, and use patterns to understand past and present events.
- understand that under certain conditions nature tends to remain the same or move toward a balance.
- understand how living and nonliving things change over time.
- interact effectively and work cooperatively.
- use problem-solving processes to develop solutions to relatively complex problems.
- connect knowledge and experiences from different subject areas.

Materials

- Six strips of colored paper, scissors, glue.
- “My Timeline” and “The Time of My Life” activity sheets.
- The “Ashland Privy Stratigraphic Section” handout.

Vocabulary

Chronology: an arrangement of events in the order in which they occurred.

Stratigraphy: the layering of deposits in archaeological sites. Cultural remains and natural sediments become buried over time: the layer on the bottom is the oldest; the layer on top is the youngest.

Context: the relationship artifacts have to each other and the situation in which they are found.

Timeline: a visual representation of events in chronological order.

Background

The proper sequence of events must be known when trying to understand the past. “The proper sequence” means that events are arranged in the order of

occurrence, establishing a *chronology*. One way to display events visually in chronological order is with a *timeline*. A timeline is divided into equal time segments (month, year, or century, for example), with one end representing the oldest events and the other end the most recent events.

Chronology is something we use everyday. When somebody tells us a story or when we watch a news report, it only makes sense if we can understand the story as it happened. Archaeologists always try to establish the age of the sites, artifacts, or events they are studying so that they can place them in chronological order. Furthermore, they rely on the objects that people made (artifacts) and where they left them (context) to learn the story of past people. Each piece of information contributes some understanding to the overall story of the past, but only if the information can be placed in chronological order.

Artifacts and other evidence of the past are often buried. Sites become buried by the deposition of small-grained particles (sand, clay, silt) through the action of wind, gravity, and water. When archaeologists excavate a site, they record the location of what they find, so that chronological order can be established. Objects discovered at the bottom are the oldest, while those near the surface are the youngest.

When looters and artifact seekers loot a site, they often remove objects that can help place the site in time. This makes it harder for archaeologists to learn the site's chronological placement. Looters also mix the stratigraphic layers together, making it difficult to place archaeological events in order. A page of the past has been torn up and thrown away.

Everyone can help stop this problem by actively protecting and preserving sites, by refusing to buy artifacts from people who dig and destroy sites, and by reporting people they see digging to law enforcement officials.

Ashland Stratigraphy

Now let's look more closely at Ashland to better understand the importance of artifacts, context, and chronology at this particular historic site. Historical archaeologists working at Ashland excavated one of the outbuildings to learn more about its function. Fortunately, no looting or vandalism took place prior to their study. The artifacts recovered indicated that the two southern rooms of this outbuilding were used as a privy, while the larger northern room functioned as a laundry room.

If you examine the "Ashland Privy Stratigraphic Section" handout, you will notice five distinct soil layers. Each layer is made up of a different soil type and contains artifacts made and used during different time periods. Analysis of the artifacts, in conjunction with the examination of written records, allowed the archaeologists to learn about the lifeways of the people who lived at Ashland. This story spans around 70 years (1850s-1920s) and includes the time in which Ashland was home to the James Clay family, the Bowman family, and the Henry McDowell family. This is how it goes:

Layer I: This is a loose gray silt layer. Many different types of artifacts were found, in particular: a Buffalo Lithia water bottle from Virginia and a jar inscribed with the word "Mason". In 1890, Buffalo Lithia water was advertised as "Useful in eliminating kidney stones, uric acid, and valuable in use of gouty diabetes and Bright's disease". Mason jars were patented in 1858 and were used to can fruit and vegetables. This layer probably reflects the activities that took place from 1890 until the 1920s, when the privy stopped being used. This layer illustrates some of the domestic activities that were carried out, for example, home canning, probably undertaken by the descendants of Henry C. and Ann Clay McDowell.

Layer II: This is a gray-brown silt soil layer. This layer yielded interesting artifacts, including two pharmaceutical bottles with the maker's name "C.A. Jones" on their sides. This company was based in Lexington, Kentucky and these bottles were made and used from 1875-1923. Also found were two pieces of an elegant French Haviland tableware set made in the 1900s, including a decal printed and gilded porcelain tureen and a soup plate.

Unlike the other layers, human fecal material was present in this layer. It contained large quantities of tiny fruit and vegetable seeds, primarily blackberry/raspberry, strawberries, and grape. The dates of these objects coincide with the time when Henry C. and Ann Clay Mc Dowell lived at Ashland. Taking together the evidence found in this layer, particularly, the presence of very expensive ceramic wares (including porcelain, different decorative types and vessel forms), we can suggest that the owners were well-off.

Layer III: This layer is characterized by a dark reddish silty clay soil. A wide variety of artifacts were identified. For example, a painted porcelain cup and plate with the initials "B". "B", which probably stands for "Bowman". John Bowman was Regent of A & M College of Kentucky University and he and his family lived at Ashland from 1866 to 1882.

Also included were animal bones representing the presence of high-quality meat and wild game (i.e. Canadian Goose, Bobwhite, Ruffed Grouse, Teal and Mallard/Black Duck). A Johann Hoff Malt Extract (Beer of Health) bottle was found. We know that this type of bottle came from Berlin and Hamburg in Germany and was used and made from 1866 -1915. A toothbrush made of hard rubber with an inscription that reads "*The Prophylactic, Florence, Hard Patented, Oct 12, 1884, AHCC 1899*" was recovered. This artifact is associated with an increased concern in hygiene and health that began in the late 1800s. The artifacts in this layer reflect the period when the Bowman's lived at Ashland. This was a time filled with official dinners and gatherings.

Layer IV: A loose black soil with ash, cinders, and charcoal makes up this layer. Several artifacts were found, including a transfer printed ironstone cup made in England in the 1850s and an ironstone chamber pot base with a maker's mark "George Jones" from Staffordshire, England. Based on this maker's mark, the chamber pot was manufactured in 1854. Also found was a child's shoe. These artifacts were probably those of James Clay and his family, who lived at Ashland from 1853-1862.

Layer V: This is a construction layer filled with bricks and crushed gravel indicating the time when the privy was constructed, around the 1850s.

Setting the Stage

Tell a familiar story out of sequence, such as *The Three Bears*, leaving some parts out. Ask students to describe the problems with the story. Why is it important to relate sequential information, including all the important details?

Procedure

1. Define chronology and explain the necessity of establishing chronological order when studying the past.
2. Have the students list six events in their lives, one on each of the six strips of colored paper. (Note: It may be helpful to have the students do this as a homework assignment with parental assistance.) Next to each event, ask students to draw an object that might symbolize that event. These events should not have obvious time links, such as “my eight birthday party”, or “I started 4th grade”. The events could be things like “my sister was born (rattle)”, “the family moved (moving van)”, “we went to Mammoth Cave on vacation (tent)”. Students should try to include events from their entire lives.
3. Divide the class into pairs. Have them shuffle their strips and exchange them with their partner, who tries to lay the strips out in correct chronological order with the most recent at the top.
4. The two students who have exchanged strips then tell each other their best guess of the proper chronological order. The strips are then returned to their owners. This is usually a humorous experience for students.
5. Lead the class in discussion: Were students able to reconstruct the timeline correctly? Why or why not? It is difficult, sometimes impossible, to reconstruct a story if the order of events is not known.
6. Have students randomly remove two events from their personal timeline. Ask students if the chronological order would have been more difficult to reconstruct and if the story of their classmate would have been as complete if there were even fewer strips. Connect this activity to archaeological sites by stressing how archaeological information is usually impossible to place in chronological order if looters have destroyed a site (like mixing up the event strips) or if people have removed artifacts (equivalent to removing some of the event strips).
7. Distribute “My Timeline” activity sheet (which forms the backing for their timeline). Students glue their own strips in chronological order, beginning with the most recent event at the top. They can write the year of the event (or they can number the events one through six) in the column to the left of their strips.

Closure

1. Distribute a copy of the “Ashland Privy Stratigraphic Section” handout to each student. Have them lay their timeline next to it.
2. Using a drawing on the chalkboard, different colors of construction paper layered on top of each other, stacking books of different color and thickness or any other visual model, demonstrate stratigraphy.
3. Using the artifacts (with dates) found in each layer, have students tell the story of the Ashland privy for each layer.
4. Using the “Ashland Privy Stratigraphic Section” handout, erase or cross out one artifact for each layer and have students retell the story of the Ashland privy with the objects removed. Have students compare both stories (that is, the story told with all the objects and the story told with the missing artifacts) and discuss the effects of illegal digging on archaeological sites and its effect on reconstructing Ashland’s history (Note: Students should conclude that if sites are vandalized and looted, we may never learn the full story of what happened at Ashland).
5. Use the “Ashland Privy Stratigraphic Section” handout and the students’ timelines to explore the following questions as a class:
 - a. In what ways is your chronology similar to an archaeological stratigraphic section? In what ways is it different?
 - b. Imagine that you cannot remember significant events in your life. How would that change the history of your life?
 - c. In what ways is a hole dug by looters in an archaeological site similar to a loss of significant events in your life?
 - d. In summary, what might you say to a looter about the importance of leaving sites undisturbed, as it relates to the importance of stratigraphy?

Evaluation

Have students complete “The Time of My Life” activity sheet or use it for discussion. Alternatively, ask students to present an extemporaneous persuasive speech that defines chronology as used by archaeologists and explain the importance of intact sites.

“The Time of My life” Activity Sheet Answers:

1. Students should express regret or a feeling of being upset. For someone to wantonly destroy the only evidence of another’s life indicates that they have little respect for the meaning of that person’s life.
2. By extension of the previous question, students should link their feelings about destruction of their timeline to the destruction of evidence of past people’s lives.

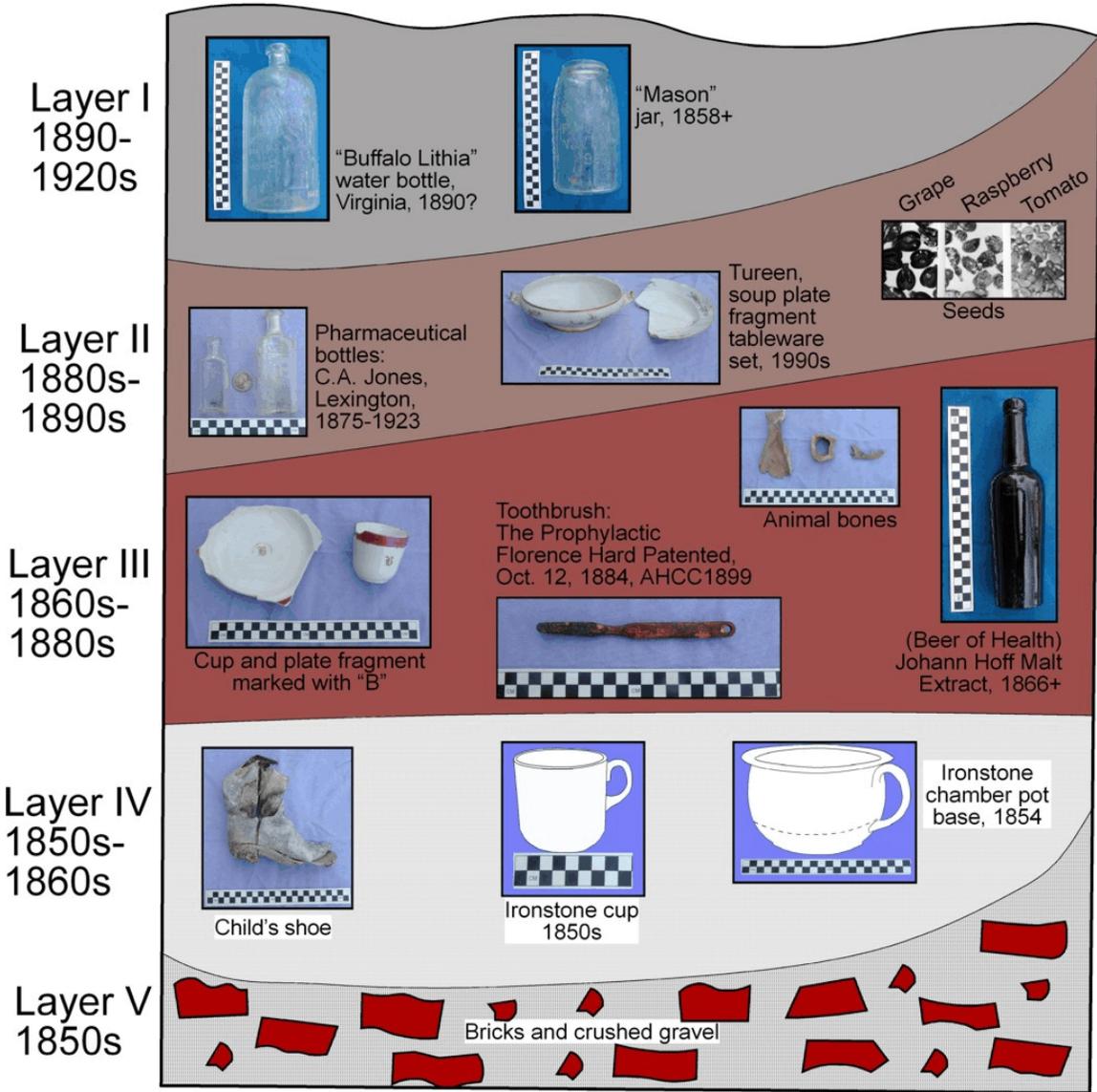
This activity was adapted from *Intrigue of the Past: A Teacher’s Activity Guide for Fourth through Seventh Grades* by Shelley J. Smith, Jeanne M.Moe, Kelly A. Letts, and Danielle M. Paterson. 1993. Bureau of Land Management, U.S. Department of the Interior, Washington, D.C., pp. 22-26.

My Timeline

Name:

Today	

Ashland Privy Stratigraphic Section



Note: This profile is not drawn to scale.

On-Site Activity

It's in the Ashland Privy!: Archaeobotany Lessons

Grade Level: 4-8

Time Required: 45-60 minutes

Curriculum Areas: science, mathematics, and language arts

Curriculum Connections: 1.2-1.4, 1.11, 1.12, 2.1, 2.2, 2.6, 2.16, 2.17, 2.20,4.2, 5.1, 5.4, 5.5, 6.1- 6.3

Students will:

- make sense of various materials/messages they read, observe, and listen to.
- write/speak to communicate ideas and information to an audience for a real purpose.
- understand scientific ways of thinking and working and use those methods to solve real-life problems.
- identify, analyze, and use patterns to understand past and present events.
- understand how living and non-living things change over time.
- observe, analyze, and interpret human behaviors to better understand people.
- interact effectively and work cooperatively.
- understand, analyze, and interpret historical conditions to develop historical perspective.
- use productive team membership skills.
- use critical thinking skills such as analyzing, categorizing, evaluating, and comparing to solve various problems in real life-situations.
- use a decision-making process to make informed decisions among options.
- use problem-solving processes to develop solutions to relatively complex problems.
- develop abilities to connect and integrate experiences and new knowledge from different subjects with what they have already learned and acquire new information.

Materials

- “Magnified Seeds I” and “Seeds Found in the Ashland Privy Deposits” handouts.
- “Magnified Seeds II” transparency handout.
- “Seed Sample Analysis” and “Plant Foods from the Ashland Privy” activity sheets. If possible, have pictures or samples of plants and actual seeds of

plants (e.g., corn, grape, blueberry) available for the students to see and touch during the activity.

Vocabulary

Archaeobotanist: a specialist who studies seeds and other plant remains from archaeological sites in order to understand the relationship between plants and people in past cultures.

Carbonize: to turn a seed or other organic item into charcoal through burning.

Cultivate: to promote or improve the growth of a plant or crop by working the soil and controlling weeds.

Flotation: a method used to recover seeds from archaeological sites. Soil is placed into a large container of swirling water. The soil falls to the container's bottom, while the seeds float to the water's surface.

Hypothesis: an explanation or interpretation that can be tested by further investigation.

Privy: comes from the Latin word meaning "private". It is another word used to refer to an outhouse, or outdoor bathroom.

Seed: a fertilized plant egg that has the capacity to produce a new plant.

Background

Seeds have several valuable features that make them useful for archaeologists to study: they can be preserved; they are distinctive; and they are present in many contexts at archaeological sites. They can be preserved for long periods of time if they are *carbonized* and stay buried in the ground in fairly constant environmental conditions. Carbonization occurs when a seed is burned and turned to charcoal, such as in a cooking fire. Other plant parts, such as leaves, flowers, or roots, are far less likely to be preserved.

Different types of plants produce different looking seeds. This distinctiveness allows researchers to identify seeds. Scientists called *archaeobotanists* study seeds and other plant evidence to analyze the relationships between plants and people.

Carbonized seeds become deposited in the ground through people's activities. Seeds show up in areas of a site where people prepared, used, and discarded plants, such as in hearths, refuse pits, and *privies*. When archaeologists excavate a site, they regularly collect small bags of soil to look for seeds. Seeds are recovered through a procedure called *flotation*, which involves placing the soil samples in a container of swirling water. The soil, which is heavy, drops to the bottom of the container, while the seeds float to the top, where they

can be scooped off and set aside to dry. The seeds and fragments of seeds are examined closely under a microscope and compared with modern identified seeds and illustrations of seeds. Archaeobotanists use the size, shape, and surface texture of a seed to help identify it.

Sites that have been dug up by looters looking for artifacts have lost their potential to tell us about past food use. Looters mix layers from earlier times with those from later times and expose previously sealed layers to contamination with modern seeds. They probably do not even realize they are destroying this fascinating evidence of the past. It is up to everyone to preserve our past.

What is the Ashland Privy?

Archaeobotanists working at Ashland have recovered a wealth of seeds from the privy outbuilding. The Ashland privy was a large and elegant outdoor bathroom for its time. It was designed as a story-and-a-half, three-room brick structure and was located 45 feet southeast of the mansion. The main floor of the structure was divided into three rooms, with lathe and plaster walls, glazed windows, and a chimney for heating.

You may wonder if this large structure was built to function as a privy alone or if it was used for other purposes as well. There are, unfortunately, no nineteenth century descriptions or illustrations of the privy. Local tradition says that the smaller southern two rooms were used as privy chambers and that the larger northern room was used as a laundry. Excavations inside the privy yielded large quantities of ceramics, bottle glass, and animal and plant remains as well as large numbers and different types of seeds. This information shows that the building was used as a privy from around the 1850s until the 1920s. Excavations outside this building revealed different pipes, suggesting that water was pumped into the building, probably for washing, and that sewage was probably drained into the privy, too.

The Ashland privy offered a wealth of plant remains, including seeds from 32 different kinds of plants, of which at least 22 were food plants. These plant remains provide a direct link to some of the foods consumed by the inhabitants of the estate during the time the privy was in use. Most of the seeds recovered are small and have hard seed coats that can survive cooking and digestion. However, it is important to remember that many food plants do not leave any recognizable residues after they have been cooked or eaten. Thus, we can only gain a partial picture of the foodways of the estate's residents.

The "Seeds Found in the Ashland Privy Deposits" handout lists all of the plants represented by seed remains within the Ashland privy deposits.

Setting the Stage

1. Have students think about the following question:
 - What information can we obtain from the study of past plant remains?

Procedure

1. Divide the class into groups of 4 –5 students. Pass out copies of the “Magnified Seeds I” handout, without the names of the seeds, to each group.
2. Give them 5 minutes to review the handout and ask them to identify which plant they think each seed comes from.
3. Have them share their findings.
4. Project the labeled “Magnified Seeds II” handout transparency to confirm their guesses.
5. Illustrate, if possible, with examples or pictures of the actual plants.
6. Pass out copies of the “Plant Foods from the Ashland Privy” activity sheet to each group. Have each group discuss what these plants are (e.g., fruit, vegetable, grain) and the conditions in which the plant typically grows. Encourage them to write down the information on the activity sheet. Have them share their results with the whole class.
 - Corn: Also known as maize; belongs to the family of grains. It is a domesticated plant that grows in cleared areas with full sunlight. In Kentucky, corn can be picked in the summer and in the fall, but dried corn can be stored for months before eating.
 - Grape: Early spring is the best time to plant grapevines. The fruit ripens in the summer. Grapes grow from temperate to tropical regions, but most vineyards are planted in areas with temperate climates.
 - Goosefoot: It is found in weedy places, such as roadsides, disturbed fields, and well-drained floodplains. It ripens in late summer and early fall.
 - Tomato: This is a fruit that ripens in the summer. It grows best with plenty of sunlight.
 - Blackberry/Raspberry: These fruits ripen in the summer. They should be planted on a good strong trellis. The plants don’t need too much water.
 - Strawberry: This fruit ripens in the summer. It grows both as a wild plant and as a cultivated plant. It grows close to the ground and needs a cool, moist climate to grow best.
 - Coffee: Its cultivation is restricted to tropical and subtropical latitudes. Coffee fruits take between 7-9 months to mature.
 - Celery: This is a vegetable that grows in the fall and needs a lot of moisture to mature.
7. Ask students to imagine uses for the listed plants. Supplement the list with the following information about how Ashland residents may have used them. Tell the students that all of these plants, except for coffee, grew in

Ashland's gardens. Encourage them to write down all their information on the "Plant Foods from the Ashland Privy" activity sheet.

- Corn: It is a food item that can be used as an ingredient in many different recipes (i.e., to make cornbread or succotash).
 - Grape: They were consumed when they were fresh, but also used in jams and wine.
 - Goosefoot: This is a food plant similar in flavor to spinach. This is a weed that can be eaten as a green.
 - Tomato: Can be preserved whole or made into sauce for use throughout the year. Draw students' attention to the fact that tomatoes were not considered food until the second half of the twentieth century. For a long time, American Indians and Euro-Americans considered tomatoes poisonous
 - Blackberry/Raspberry: They were consumed when they were fresh, but also in preserves, like jams and marmalades.
 - Strawberry: It was consumed when it was fresh, but also in preserves, like jams and marmalades.
 - Coffee: Charred coffee beans suggest that the Ashland residents probably roasted and ground their own coffee.
 - Celery: It is a common ingredient in recipes dating to the late nineteenth and early twentieth centuries. It was probably used to flavor food prepared at Ashland.
9. Present background information about how archaeobotanists analyze and how archaeologists use seed analysis to learn about past peoples' use of plants.
 10. Distribute the "Seed Sample Analysis" activity sheet. This is a very simplified version of what an actual seed analysis sheet might look like. Tell the students that they are archaeobotanists and have been given this sample of seeds to analyze from the Ashland privy. Explain that they will analyze the seed sample and interpret their results. Tell the students that all of these seeds were found in human fecal remains deposited over time in this privy.
 11. Matching seeds in the sample to those on the "Magnified Seeds II" handout, students identify the plants for each seed and write a paragraph interpreting the results from their sample (For example: "The seed sample included raspberry, grape, and tomato. Because the plants represented here were plants that ripened in the summer, it is likely that the seeds were discarded during that time of year. However, note that these plants could also be preserved. This may indicate that they were probably consumed all year round").
 12. Have students identify the actual seeds recovered from the Ashland privy at the privy exhibit on display at the Ashland privy outbuilding. Draw students' attention to the fact that many more items came from the privy besides the seeds, including fine tableware, shoes, bottles, and animal remains, and that the privy was used as a handy place to dispose of unwanted trash.

Closure

In summary, what two kinds of information can seeds from archaeological sites tell us? Why is it important to leave sites undisturbed if archaeologists are to use seeds to help them learn about past foodways?

Evaluation

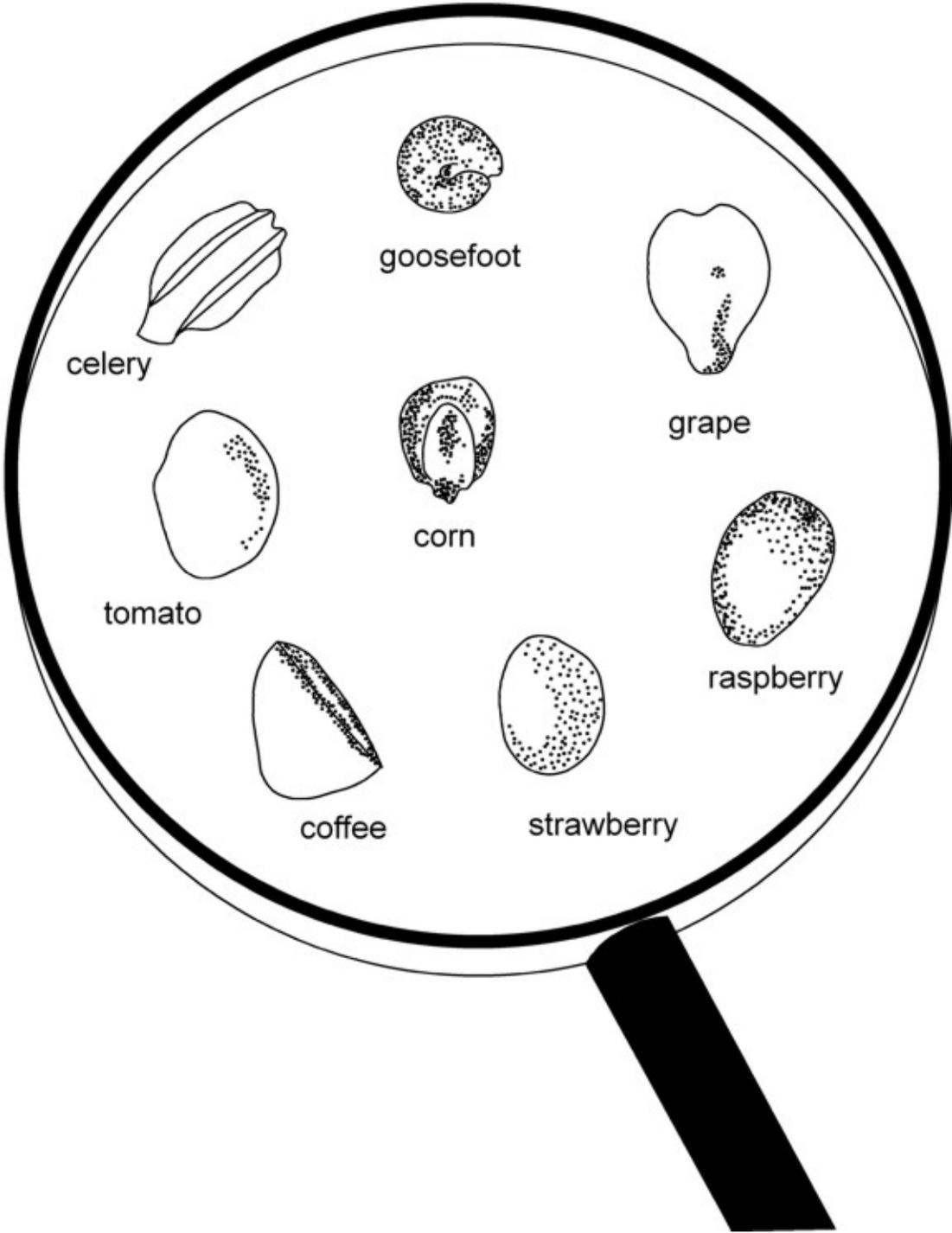
Evaluate students on their identification of the seeds and the application of their knowledge to interpreting the seed sample results.

This activity was adapted from *Intrigue of the Past: North Carolina's First Peoples. A Teacher's Activity Guide For Fourth Through Seventh Grades* by Margo Price L., Patricia M. Samford, and Vincas Steponaitis. 2001. Research Laboratories of Archaeology. The University of North Carolina at Chapel Hill, Chapel Hill, pp. 84-91.

Magnified Seeds I



Magnified Seeds II



Seeds Found in the Ashland Privy Deposits

<u>Fruits</u>	<u>Vegetables</u>	<u>Grains</u>	<u>Others</u>	<u>Weeds and Ornamentals</u>
Blackberry/ Raspberry	Tomato	Corn cupule	English Walnut	Amaranth
Strawberry	Capsicum pepper	Corn Kernel	Hickory	Cheno/am
Mulberry	Squash/ gourd		Coffee	Goosefoot
Grape	Celery		Peanut	Purslane
Blueberry	Celery family		Black Walnut	Smartweed
Melon			Butternut	Grass family
Watermelon				Holly
Cherry				Nightshade family
Plum				
Peach				

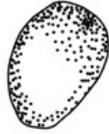
PLANT FOODS FROM THE ASHLAND PRIVY

<u>PLANT NAME</u>	<u>TYPE OF PLANT</u>	<u>PLACE AND SEASON PLANT GROWS</u>	<u>USES OF PLANT</u>
CORN			
GRAPE			
GOOSEFOOT			
TOMATO			
BLACKBERRY/ RASPBERRY			
STRAWBERRY			
COFFEE			
CELERY			

Seed Sample Analysis

Name/s:

Ashland Privy, Layer II
1880s-1890s



1. Name of plant:



2. Name of plant:



3. Name of plant:

Preservation Activity I Artifact Ethics

Grade Level: 4-8

Time Required: One to three 45-minute periods

Curriculum Areas: social studies and language arts

Curriculum Connections: 1.2-1.4, 2.16, 2.17, 5.1, 5.4

Students will:

- make sense of things they read, observe, listen to.
- recognize how tensions and conflict can develop between and among individuals, groups, and institutions.
- analyze strategies and ways to achieve conflict resolution.
- use critical thinking skills.
- use a decision making process.

Materials:

- Dilemma cards (copy the sheet, laminate, and cut apart).
- “Kentucky Laws Pertaining to Archaeological Sites”, “Thumbnail Sketch of NAGPRA: Native American Graves Protection and Repatriation Act”, and “Federal Laws Pertaining to Archaeology” handouts.

Background

Our nation’s archaeological sites are being destroyed at an alarming rate. As a result, scientific information is being destroyed, places where people lived long ago are being aesthetically compromised, and all Americans are losing an important part of their collective heritage. This activity encourages students to examine personal beliefs and feelings concerning the protection of archaeological sites and artifacts, to decide what action they would take in difficult situations, and to suggest solutions to the widespread problem of archaeological resource destruction. There are no “right” or “wrong” answers except where laws apply.

Federal antiquities preservation laws specify that it is illegal to collect, deface, injure, or excavate sites and artifacts older than 100 years on public land. Public land includes lands administered by any federal agency, such as the Bureau of Land Management, National Park Service, Forest Service, Bureau of Reclamation, and the Fish and Wildlife Service. Professional archaeologists are granted permits by federal and state agencies in order to conduct archaeological fieldwork.

Unlike some states, Kentucky does not have any state laws that directly mirror federal laws dealing with the protection and preservation of archaeological sites. However, the *Kentucky Antiquities Act* does provide some protection for

sites on public lands; statues applying to grave robbing can be used to protect prehistoric grave sites; and the act that created the Kentucky Heritage Council goes on record for preserving archaeological sites. (See the Kentucky Laws handout in this guide).

People enjoying recreation out-of-doors sometimes discover an archaeological site or artifact. By law, the artifact is to be left in place, and the site left undisturbed. Discoveries of rare or remarkable artifacts and sites should be reported to the federal or state land-managing agency, or, in the case of private lands, to a local archaeologist or to the State Historic Preservation Office (In Kentucky, write/call the Kentucky Heritage Council, 300 Washington Street, Frankfort, Kentucky, 40601, 502/564-6661. You can also contact them through their website at: <http://www.kyheritage.org>

Some people who collect artifacts and loot sites are engaged in other illegal activities, are armed with weapons, and should be considered dangerous. Students should never approach someone they see collecting artifacts or looting sites. The best thing to do is to record information about the people - their physical description, what they were seen doing, the license number of their vehicle - and immediately report them to law enforcement authorities. The Archaeological Resources Protection Act provides for rewards to people whose information leads to the arrest and conviction of individuals disturbing sites.

Setting the Stage

1. Ask students: Have you ever been in a situation when you were not sure of the right way to behave or respond? For example, your best friend has his hair cut in a style you think is very unattractive. What do you tell your friend when he asks if you like the way it looks? Or, your best friend shows you a video game she has stolen from another friend's house. What do you say to your friend? Do you report the incident to someone? If so, to whom?
2. Explain that the following activity will require decision-making about difficult situations. As they share solutions to the following dilemmas, students should be prepared to give reasons for their decisions.

Procedure

1. Copy the dilemma sheets, laminate and cut them apart. (Students could also create their own Dilemma Cards, with each student responsible for one dilemma).
2. Read one of the Dilemma Cards aloud to the entire class. Without group discussion, ask the class to write a paragraph or two about how they feel about the dilemma, and what they would do about it. Have them keep their papers for their own values clarification so they can compare their answers before and after the discussion (often values change once there is group discussion and others' perspectives are introduced).

- Another approach to doing this activity is to have the students turn in their papers (without names) and write several of their dilemma solutions on the blackboard until you have listed many strategies and viewpoints.
3. Have the students discuss the pros and cons of each solution and perhaps come to a class consensus. This activity can help students clarify their values, while demonstrating that there are many perspectives on any issue. Ask the students to reconsider what they had originally written. Have their values changed after listening to other viewpoints?
 4. Divide the class into groups of 4 to 5 students and give each group one of the Dilemma Cards. Have the students discuss the dilemma as a group and decide how they would solve the problem. If students create a solution they think is better than the ones listed, allow them to share this solution. Allow 15 minutes for their discussion. Choose a spokesperson for each group to report back to the class as a whole. Students should describe their group's dilemma, their decision, and their reasons for taking the actions or positions they did. Were they able to all agree on what they would do?
 5. Ask students if they had enough information upon which to base their decisions. Ask them if their opinion changed once they heard different points of view.

Closure

Ask students to share their overall position concerning the protection of archaeological resources. Or, ask them to create a symbol, story, poem, drawing or song that summarizes their opinion.

Evaluation

Evaluate student participation in the dilemma discussions and the closure activities.

This activity was adapted from *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades* by Shelley J. Smith, Jeanne M. Moe, Kelly A. Letts, and Danielle M. Paterson. 1993. Bureau of Land Management, U.S. Department of the Interior, Washington, D.C., pp. 108-113; and *Saving a Kentucky Time Capsule. A Companion Guide for Intermediate and Middle School Social Studies and Science Teachers* by Judy Sizemore. 2002. Kentucky Archaeology. Episode Three. Kentucky Heritage Council. Video Education Series, Frankfort, pp. 32-35.

KENTUCKY LAWS PERTAINING TO ARCHAEOLOGICAL SITES

Unlike some states, Kentucky does not have any laws that mirror federal laws dealing with the protection and preservation of archaeological sites. However, the *Kentucky Antiquities Act* does provide some protection for sites on public lands; statutes applying to grave robbing can be used to protect prehistoric grave sites; and the act that created the Kentucky Heritage Council goes on record for preserving archaeological sites. Here are brief summaries of the Kentucky state laws that pertain to archaeological sites. You may find the complete text of these laws at this web address: <http://www.lrc.state.ky.us/krs/titles.htm> Search first on the chapter number (the first three numbers) and then by section (the numbers after the “.”).

KRS 164.705 - KRS 164.735; KRS 164.990

This is known as the *Kentucky Antiquities Act*, which was created in 1962. It makes it public policy to preserve archaeological sites and objects of antiquity and to limit archaeological work (exploration, excavation, and collection) to qualified persons and institutions. It prohibits the willful damage or destruction of archaeological sites on lands owned or leased by the state, state agencies, counties, or municipalities, and requires a permit from the University of Kentucky's Department of Anthropology to explore or excavate archaeological sites on these lands. It requires anyone who discovers a site to report it to the Department. It is a felony to violate the sections of the *Kentucky Antiquities Act* prohibiting the willful destruction of archaeological sites and requiring permits to excavate.

KRS 171.3801 - KRS 171.395

These statutes formally created the Kentucky Heritage Council, the state agency whose purpose it is to preserve and protect all meaningful vestiges of Kentucky's heritage, including archaeological sites. The Council maintains an inventory of all archaeological sites recorded in the state, and maintains lists of sites with state or national significance. The director is the State Historic Preservation Officer, a role created by the 1966 National Historic Preservation Act. Thus, the Council administrates the activities related to this act, most importantly for archaeological sites, the National Register of Historic Places and the review and oversight responsibilities that ensure compliance with federal cultural resource management laws and regulations.

KRS 433.870 - 433.885

The *Kentucky Cave Protection Act* makes it illegal, among other things, to disturb or damage cave surfaces or materials found inside caves, including archaeological remains. Archaeological investigations inside caves cannot be conducted without a permit from the State Archaeologist, and must be carried out under the supervision of the State Archaeologist and the Kentucky Heritage Council. It is a misdemeanor to violate sections of this Act.

Various KRS Statutes (e.g., **KRS 525.110; KRS 525.120; KRS 213.110; KRS 72.020**)

A variety of statutes related to grave robbing provide a measure of protection for Native American burials because they do not make a distinction on the basis of grave age or presence of a marker. Some statutes make it a felony or a misdemeanor to commit criminal mischief and theft by unlawful taking; to desecrate venerated objects (intentionally disturb human remains or the objects buried with the remains); or to abuse a corpse. If human remains are encountered, removal and transit permits must be obtained, and a coroner must be notified before the remains are removed.

THUMBNAIL SKETCH OF NAGPRA: NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

NAGPRA is a federal law enacted in 1990. It pertains to Native American human remains, grave goods, and objects of cultural patrimony. Objects of cultural patrimony are things that are/were communally owned by a tribe and are of unique importance to the tribe as a whole.

NAGPRA requires compliance from all institutions that receive federal funds and all federal agencies. Museums must provide inventories of human remains, grave goods, and objects of cultural patrimony to the federal government and to the tribes most closely affiliated with the remains and materials in their collections. When federal agencies (in Kentucky, groups like the U.S. Forest Service, the U.S. Army Corps of Engineers, the National Park Service, or the Federal Highway Administration) encounter graves, they must consult with the appropriate federally recognized Native American tribes concerning the treatment of those remains and the associated grave goods. However, the spirit of the law was not meant to stop at that point.

Basically, NAGPRA provides legal guidelines to resolve the ongoing competing philosophies/positions of Native Americans and scientists/museums with respect to how Native American human remains, grave goods, and objects of cultural patrimony are treated.

Here is a brief summary of these differing philosophies/positions:

Native Americans argue that appropriating human remains

- violates the sacredness of the dead;
- violates the civil rights of the living; and
- alienates tribal members from their cultural heritage.

Scientists/museum officials argue that human remains and material objects (artifacts)

- have scientific and educational value; and
- should therefore be preserved.

What NAGPRA has done is to open a dialogue between Native Americans and scientists/museum officials that has had many benefits and has enhanced our understanding of Native American cultures in the past and increased our awareness of the enormous cultural changes experienced by many Native groups in the wake of contact with Euroamericans.

This has forced museums to create complete inventories of their collections, to reexamine their acquisition policies, and to put in place clear de-accessioning policies. (Any claim for repatriation must be substantiated with a considerable body of proof demonstrating the direct relationship between the living Native Americans and the remains or objects under consideration). It has forced federal agencies to develop policies for the recovery and study of human remains and to make arrangements for their final disposition (either reburial or curation in an approved facility).

It has made everyone more sensitive to the recovery, care, curation, display, educational use, and research potential of Native American remains and material goods.

FEDERAL LAWS PERTAINING TO ARCHAEOLOGY

Antiquities Act of 1906. This law protected cultural materials found on public lands and was intended to stop the destruction of prehistoric sites and artifacts in the West. It also set-up a way for responsible archaeologists to excavate important sites.

Historic Sites Act of 1935. This act authorized several programs to be carried out under the National Park Service. Under this law, sites that have exceptional value for commemorating or illustrating U.S. history can be protected as National Historic Landmarks.

National Historic Preservation Act (NHPA) of 1966. At the time of this law's passage, more archaeological sites and historic buildings were being destroyed by rapid economic development than by pothunting and vandalism. This landmark piece of legislation extends the protection of the federal government to historic resources at the state and local levels. The act provides for federal grants to state and territorial historic preservation agencies, and its passage led to the establishment of the National Register of Historic Places. The National Register includes not only national historic landmarks, but also sites, objects, buildings, and districts (collections of structures) that are significant in American history, architecture, archaeology, and culture. Since the mid-1970s, all construction on federal lands or that uses federal funds requires an archaeological survey to find out if archaeological sites will be damaged by the construction, and how the information from the sites can be recorded before that happens.

Archaeological Resources Protection Act (ARPA) of 1979. This law gives more protection to archaeological resources on public and Indian lands and encourages the sharing of information gathered from these sites. It also toughens penalties for the unauthorized excavation of or damage to archaeological sites, and controls the sale of artifacts.

Native American Graves Protection and Repatriation Act (NAGPRA) of 1990. Archaeologists exploring the past sometimes come upon the bones and other remains of human beings. Prehistoric remains found in archaeological sites in the United States are the remains of Native American peoples. Contemporary Native Americans have raised concerns that the burial grounds of their tribes should not be disturbed, any more than the cemeteries of other groups. Most American Indians believe that the remains of their ancestors should not be stored or displayed in museums, but should be reburied according to the traditions and religious beliefs of their tribes. NAGPRA protects Native American grave sites on lands managed by the federal government. The law requires thousands of federally funded museums and agencies to inventory their holdings of human remains, grave goods, sacred objects, and other items important to Native American cultures. The museums and agencies must tell the tribes about the sacred and cultural items in their collections, and return the objects to the tribes that claim them.

Adapted from the Boy Scouts of America *Archaeology Merit Badge Book*, pp. 26-29.

Dilemma 1

You and your family are visiting a rock art site at a national park when you see two young men spray painting over the rock art. What should you do?

- Do nothing, mind your own business.
- Ask the young men if they realize that they are breaking the law.
- Make a citizen's arrest.
- Wait until they leave and then try to wipe the paint off.
- Leave and report the incident to a park ranger.
- Other.

Dilemma 2

You and your friends are exploring the mouth of a cave in the national forest and discover some arrowheads. You remember that it is illegal to remove artifacts from federal land, but your friends argue that it won't matter and no one will ever know. They pocket the arrowheads. What do you do?

- Take some yourself.
- Dig around to see what else you can find.
- Try to convince your friends to leave the artifacts where they are.
- Say nothing to your friends but report their actions to the police.
- Say nothing about your friends' actions but inform the national forest district office about the site.
- Other.

Dilemma 3

You discover what appears to be the site of an American Indian settlement on your family's land. What do you do?

- Dig up artifacts and sell them to your friends at school.
- Tell your family about it and urge them to dig and sell the artifacts.
- Tell your family about it and urge them to report the site to the Kentucky Heritage Council or nearby agency archaeologist.
- Don't tell anyone but remember where the site is.
- Other

Dilemma 4

A friend of your family offers to sell you some artifacts. He says that they came from an old privy behind an important historic house, where a famous politician once lived in the 1800s. What do you do?

- Buy the artifacts.
- Buy the artifacts and take them to the police as evidence.
- Refuse to buy any artifacts but say nothing.
- Refuse to buy any artifacts and mention that you feel it is wrong to dig sites if you are not a professional archaeologist.
- Refuse to buy any artifacts and mention that it is illegal to sell artifacts.
- Other.

Dilemma 5

You are on a scout trip to visit an old pioneer fort, owned and managed by the Kentucky State Parks. While touring the fort, your friends notice that there are artifacts on the ground. What do you do?

- Act as though you saw nothing; let your friends take the artifacts home.
- Pick up just one artifact as a souvenir.
- Do nothing, knowing that you were obeying the law by not taking anything.
- Find another scout troop.
- Report your finding to the fort's administration.
- Leave the artifacts where you found them and contact the Kentucky Heritage Council.
- Other.

Dilemma 6

You are visiting a rockshelter with rock art paintings in a national forest. A group of teenagers is starting a fire for a barbecue right beneath some of the paintings. What do you do?

- Tell them to move the fire away from the paintings.
- Act as if you have not seen them.
- Tell them that by having a barbecue beneath such old paintings they are destroying an important part of our American Indian heritage.
- Tell them that it is illegal to barbecue foods in rockshelters.
- Report to the National Forest personnel what you saw.
- Other.

Preservation Activity II Take Preservation Into Your Hands

Grade Level: 4-8

Time Required: 3 class sessions of 60 minutes each

Curriculum Areas: social studies, language arts, arts

Curriculum Connections: 1.2, 1.3, 1.4, 1.11, 1.12, 1.13,
2.17, 2.22, 2.23, 4.2, 5.1, 5.2, 6.1

Students will:

- make sense of various things/messages they read, observe, and listen to.
- Write/speak to communicate ideas and information to different audiences for different purposes.
- make sense of ideas and communicate ideas with the visual arts.
- interact effectively and work cooperatively.
- create works of art and make presentations to convey a point of view.
- analyze their own and others' artistic products using accepted standards.
- use productive team membership skills.
- use critical thinking skills such as analyzing, evaluating, and comparing.
- use creative thinking skills to develop or invent a product.
- connect knowledge and experience from different subject areas.

Materials

- Color copies of "Poster Sample I & II" handouts.
- Copies of "Poster Evaluation" activity sheet.
- Glue, photos, drawings, and colored pencils.

Background

The past is a fragile, nonrenewable resource that is being destroyed rapidly. Pre-Columbian and historic sites are disappearing at an alarming rate. Educating the public about the past is important if we want people to take pride in their cultural heritage and recognize the need to preserve their cultural resources for the future. Archaeologists and organizations/institutions (for example, the Kentucky Heritage Council and the Kentucky Archaeological Survey) rely on different strategies to increase public awareness and promote stewardship and preservation of the material remains of the past. These often take the form of public-oriented talks, leaflets, booklets, books, video documentaries, state preservation week activities, setting up exhibits, and engaging the public in archaeological research.

State Archaeology Week/Month celebrations serve as a venue to bring knowledge about the past to the public. While Kentucky does not currently have an Archaeology Week celebration as other states do, it does, however, observe Preservation Week in May, which is National Preservation Month. This is an opportunity to inform Kentuckians about their state's historic resources and their rich cultural heritage. In order to promote preservation and encourage people to participate in this event, the Kentucky Heritage Council and Preservation Kentucky, Inc. use a wide range of media to reach out to as many people as possible. Preservation Week posters are an attractive and effective way to draw people from all over the state to this event. Furthermore, artwork is a powerful way to communicate ideas to a broad group of people.

Setting the Stage

This activity will help students discover the importance of artwork in communicating ideas. As an icebreaker for this activity, have students think about the following question:

- What qualities make a poster good or bad? Jot down their ideas on the board.

Procedure

1. Divide the class into groups of 3-4 students.
2. Give out color copies of the "Poster Sample I & II" handouts to each group or make color transparencies to project them.

A.1. Have students focus on the poster text.

1. Ask students to identify key words used by each poster designer (i.e., restore, renew, rediscover) and ask them to identify what kind of words they are (i.e., verbs, nouns, adjectives).
2. Have students discuss with the whole class these questions:
 - Why did the poster's designer choose a verb instead of an adjective?
 - What is the purpose of using an action verb? (A possible answer is that the designer wants to engage the public). Brainstorm with students other possible action verbs suitable for this type of poster (i.e., hold, preserve, discover, unravel) and list them on the board.
 - What is the main message of the poster?

A.2. Have students focus on the poster artwork.

Ask students to discuss the following questions:

1. What kinds of images are used?
2. What do these images have to do with archaeology and preservation?
3. What media did the poster designer use?

4. How does the media selected help to communicate the message and/or appeal to the audience?
5. How has the poster designer used the elements of art (line, shape, color, texture, and space) to match the images to the message? (Draw students' attention to the use of lines in Poster 1 to reinforce the idea of a "puzzle" and in Poster 2 to reinforce the idea of a "new angle").
6. Ask how the texture of the image in Poster 4 matches the title. How does the simplicity of the shapes in Poster 3 draw our thoughts to schools?
7. How has the designer used the principles of design to reinforce the message? What is the focal point of the composition? How is contrast used? Is the balance symmetrical or asymmetrical? Why? Is the lettering well-positioned to draw the viewer's attention?

A.3. Have students evaluate the poster

1. Pass out a copy of the "Poster Evaluation" activity sheet and have each group examine and rate each poster on the basis of the following three aspects:
 - Is the message clear?
 - Does the artwork match the message?
 - Is this a good poster?

Extension I

1. Have students select a site in their own community that they feel needs to be preserved for the future (for example, Ashland The Henry Clay Estate). Tell them that they have been asked to design a Preservation Week poster for their community. Have students brainstorm and select a message for their poster (Note: Encourage students not to copy from the ones examined on the poster sample handouts but to think and create their own messages).
2. For homework, ask each group to take a picture, go to magazines or newspapers for images, or make a drawing to illustrate their message.
3. Students will come to class with different images/photos or drawings. Have each group select the most effective one, based on the message that they wish to convey to the public. (Note: Remind students of the poster criteria).
4. Have each group design their own Preservation Week poster for the National Trust for Historic Preservation's poster contest (Note: Encourage students to make an attractive and creative product that will have an impact on the public). (Note: This activity may be done in collaboration with the art teacher. The Professional Development KET video "Posters and Books" may be used as an additional resource to create an effective poster).

Extension II

1. Have each group display their posters (i.e., at the school library, main hallway or special activity room) and set up a time (i.e., during lunch break) when teachers and other classmates can talk with the students to learn more about the importance of Preservation Week.
2. Submit their posters to celebrate Preservation Week to a national poster contest, such as the one organized by the National Trust. To obtain additional information check out the National Trust for Historic Preservation website at:
<http://www.nthp.org/preservationweek/index.asp>

Extension III

1. Have students take a photograph of an historic building, site or structure in their community.
2. Have them write an essay describing the historic resource and explaining its significance and the importance of protecting the historic resource for the future.
3. After peer/teacher review, select the best three essays from the class and submit them to “Spirit of a Place”, a competition organized by the Kentucky Heritage Council and Preservation Kentucky, Inc., held every May. To obtain more information about this competition, check out their website at:
http://www.preservationkentucky.org/news/PK_2002_Essays/Essays2002html

Evaluation

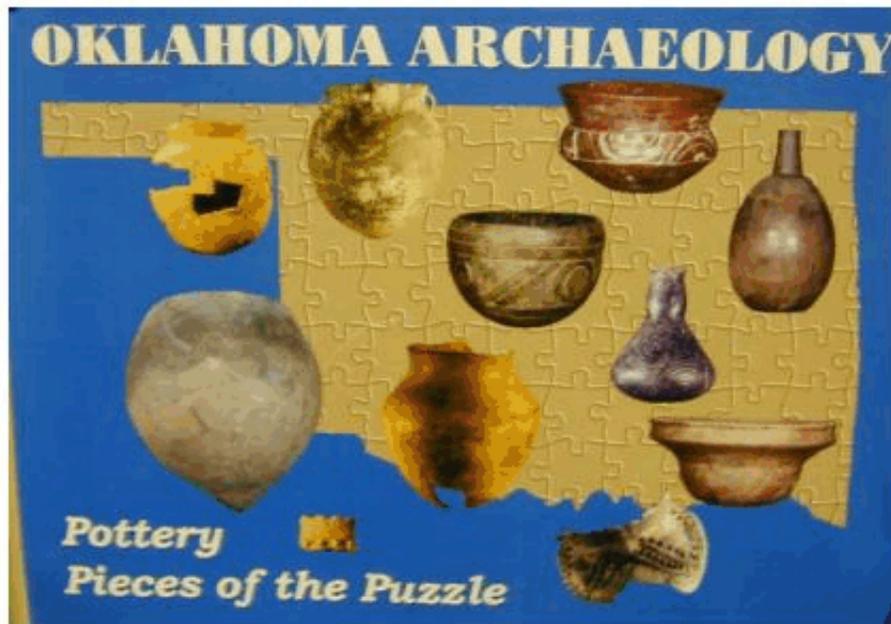
Teacher Evaluation

1. Teachers can assess each group’s work based on how well each group succeeded in communicating their message of the importance of preserving the past for the future.

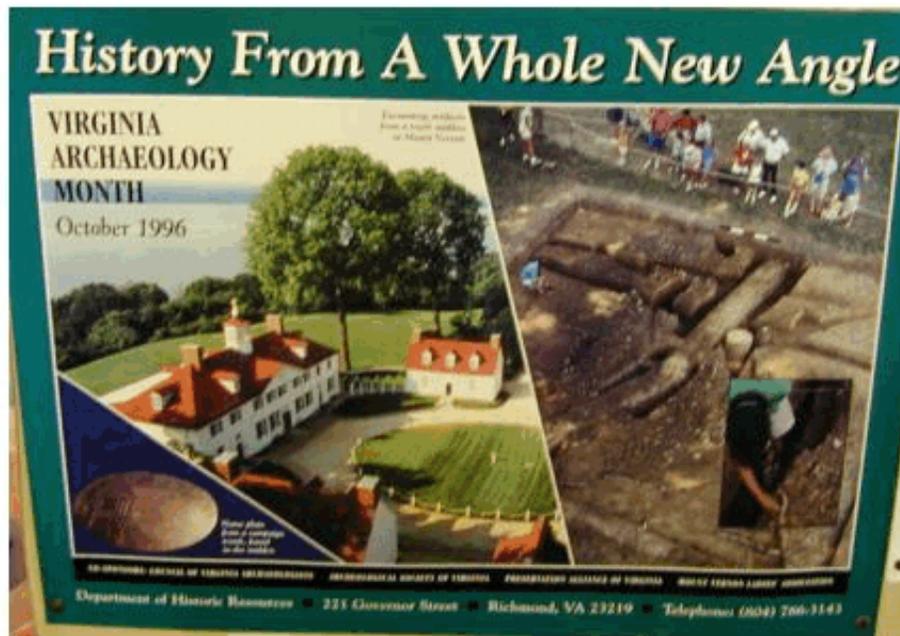
Student Evaluation

1. Have students evaluate their peers’ artwork using the same “Poster Evaluation” activity sheet they used to assess the effectiveness of the “Poster Sample I and II” handouts.

POSTER SAMPLE I

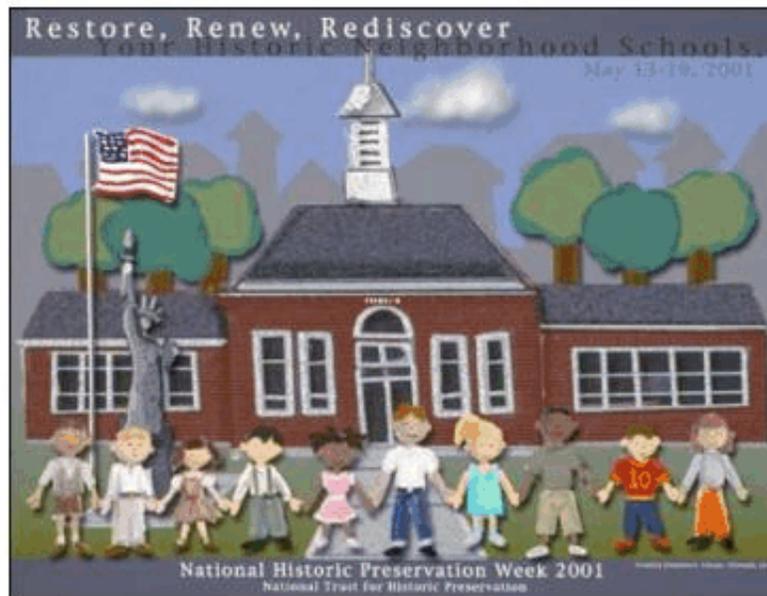


1. Pottery: Pieces Of The Puzzle
Oklahoma Archaeology

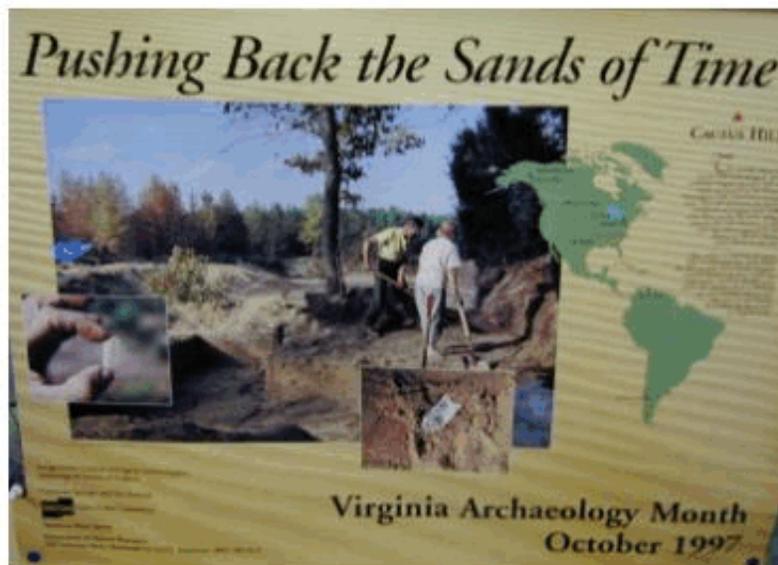


2. History From A Whole New Angle
Virginia Archaeology Month
October 1996

POSTER SAMPLE II



**3. Restore, Renew, Rediscover
Your Historic Neighborhood Schools.**
National Historic Preservation Week 2001
May 13-19, 2001



4. Pushing Back The Sands Of Time
Virginia Archaeology Week
October 1997

POSTER EVALUATION

POSTER #	Is the message clear ?			Does the picture/drawing match the message?			Is this a good poster?		
	Yes	No	Somewhat	Yes	No	Somewhat	Yes	No	Somewhat
1									
2									
3									
4									

Resource List

Curriculum Materials

Many curricular resources are available from the Kentucky Archaeological Survey. You may contact the Survey at 1020-A Export Street, Lexington, KY, 40506-9854; call them at 859-257-5173; or email your request for information to A. Gwynn Henderson, the Survey's Education Coordinator: aghend2@uky.edu

Selected curriculum materials of interest available from the **Survey** include the following:

Guidelines for Evaluation of Archaeology Education Materials by the Society for American Archaeology Public Education Committee. A very good resource. Good discussion of the purpose and benefits of archaeology; discusses major misconceptions about archaeology and archaeologists; and outlines concepts essential to understanding archaeology. Provides a three-part guidelines section for evaluating existing archaeological education materials and in developing new ones (i.e., minimal information, archaeological method and theory, and educational/curricular elements).

Archaeology and You by George E. Stuart and Francis P. McManamon is a great introductory on-line booklet about the field of archaeology. It provides a brief discussion of archaeology in America, covering basic information about the science of archaeology, archaeological terminology and some of the more spectacular sites. It touches on archaeology as a career and how the law affects archaeological work, and it contains a bibliography of related readings and other available materials. It contains links and lists of other great sources of archaeological information, and suggestions for those who would like to volunteer on projects or who are thinking about careers in archaeology. The address is <http://www.saa.org/whatis/arch&you/cover.html>

You can get a copy of **Intrigue of the Past: A Teacher's Activity Guide for Fourth Through Seventh Grade**, the curriculum guide for Project Archaeology and the lessons from which two activities in this guide were adapted from **Why is the Past Important?** and **The Importance of Time: Understanding Chronology**, from Megg Heath, Imagination Team, BLM Heritage Education Program, Anasazi Heritage Center, P.O. Box 758, Dolores, CO, 81323. Phone: 970-882-4811. It is an excellent curriculum guide that may be used in its entirety or as supplemental material. It consists of 28 classroom-tested lessons supporting social studies, science, art, language arts, and math curricula using archaeology as the focus. The Guide is divided into three parts (Fundamental Concepts, the Process of Archaeology, and Issues in Archaeology) and includes appendices and vocabulary. Their web address is www.co.blm.gov/heritage/project_archaeology.htm

Other Resources

To learn more about historical archaeology, read *In Small Things Forgotten: An Archaeology Of Early American Life* by James Deetz. 1996. New York: Anchor Books/Doubleday.

To obtain more information about the life of Henry Clay, read *Henry Clay: Statesman For The Union* by Robert V. Remini. 1993. New York: WWNorton.

To gain more insights into plantation slavery, read *Back Of The Big House: The Architecture Of Plantation Slavery* by Vlach, John Michael. 1993. The University of North Carolina Press.

To find out how to create an effective poster, check out KET's Professional Development video titled *Posters and Books*. You can visit KET's website at: www.ket.org

Sources Consulted for Content

McBride, Stephen W. and Kim A. McBride

1 *Preliminary Archaeological Investigations at Ashland, 15FA206, Lexington, Kentucky*. Archaeological Report No. 245. Program for Cultural Resource Assessment, University of Kentucky, Lexington.

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1993 *Archaeology at Henry Clay's Ashland Estate: Investigations of the Mansion, Yard, and Privy*. Archaeological Report No.281. Program for Cultural Resource Assessment, University of Kentucky, Lexington.

Mc Bride, Stephen W. and Mark E. Esarey

1995 *The Archaeology of the Ashland Privy, Lexington, Kentucky*. In *Historical Archaeology in Kentucky*, edited by Kim A. McBride, W. Stephen McBride, and David Pollack, pp.265-295. Kentucky Heritage Council.

O'Malley, Nancy, Donald W. Linebaugh, Jeanie Duwan, and R. Berle Clay

1999 *"A Brilliant And Pleasant Light":Nineteenth-Century Gas Lighting at Ashland, Lexington, Fayette County, Kentucky*. Report No.413. Program for Archaeological Research, University of Kentucky, Lexington.

Selected Websites

The Kentucky Heritage Council's Web Page contains news; upcoming events; information about Kentucky-based Native American and African American Heritage Commissions; information about the National Register of Historic Places; a historic building survey; architecture and archaeology publications as well links to other organizations (i.e., the Kentucky Archaeological Survey). The address is <http://www.kyheritage.org>

The Kentucky Archaeological Survey's Web Page includes news; upcoming events; information about the four periods of Kentucky prehistory, along with pictures of artifacts and sites; information about on-going projects; a list of publications; and a Resource Guide. *Myths About Archaeology* lists common myths about archaeology and archaeologists, while *Test Your Knowledge of Kentucky Prehistory* is an interactive quiz that challenges misconceptions about Kentucky prehistory. The address is: <http://www.kyheritage.org/kas.htm>

The University of Kentucky's William S. Webb Museum of Anthropology web page contains information, images, and activities about Kentucky's prehistoric and historic past as told through archaeology. The address is case sensitive: <http://www.uky.edu/AS/Anthropology/Museum>

The Henry Clay Memorial Foundation's Web Page is a valuable online resource offering up-to-date historical and archaeological information about various aspects related to life at the Ashland Estate. All are illustrated with colorful pictures and drawings. This includes: upcoming events; detailed information about the history of the mansion and its inhabitants, garden, and outbuildings; and a teacher's page where teachers can sign up their classes for site tours and archaeology activities. The address is: <http://www.henryclay.org>